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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PANOS, JEFFREY C

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,905

Applicant(s)

KUESTERS, ECKHARD H.

Examiner

Jeffrey C. Panos

Art Unit

3713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-20 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The Specification does not designate what the “predetermined time” is after actuation of the switching device therefore it is not enabled. The predetermined time period spoken of in the Applicant's claims and Specification does not reflect a specific or singular predetermined time period. The Applicant put a significant amount of stress on this; even though the disclosure gives examples with example time periods, there is not one predetermined time period enabled. For example, claim 2 states, “a timer configured to turn the transmitter on upon actuation of the switching device and to turn the transmitter off a predetermined time after actuation of the switching device.” This does not mean “ ‘a few seconds,’ or perhaps ‘20 seconds’ ” as was argued. The claim does not state one of many predetermined time periods randomly selected by the device. Therefore, appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, and 4-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englmeier (US Patent No. 5,423,549) in view of Barnhill (US Patent No. 5,112,055) and in further view of Stoffer (US Patent No. 5,463,376).

Englmeier discloses a golf ball with a spherical shaped body having a dimpled outer surface (FIG 3) that has a power source contained within the body (FIG 3). There is a transmitter coupled to the power source that emits an electromagnetic signal (Abstract). Stoffer discloses a timing device capable of being configured to control transmission of the signal for a predetermined time after actuation (column 5, lines 41-67). However, Englmeier does not disclose a switching device contained within the body that actuates due to a detected shock.

One skill in the art would know that when transmitting signals relaying the location of an object, it would be strongly desired to transmit only when necessary as to not waste current, power, or overall capacity of energy.

Englmeier supports this fact in applying it to the tracking of golf balls in stating that a pulsed transmission signal is used for the purpose of energy saving and this switching transistor is controlled by the clock pulses generated by this control unit (column 5, lines 60-65).

In incorporating this energy saving mechanism, Englmeier discloses a transmitter that can be turned on and off by a timer circuit taught by Stoffer (column 5, lines 41-67) in order to limit the time during which the ball transmits. Further, a second timer circuit delaying the transmission for a predetermined amount of time is just a Duplication of Parts (MPEP § 2144), which is duplicated from the timer circuit taught by Stoffer. Duplication of Parts states, "*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.)." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

Art Unit: 3713

was made to modify Englmeier by providing the timer circuit taught by Stoffer to have a more specific predetermined time period for which the signal is transmitted so that it may save energy.

However, transmission is wasted in Englmeier as transmission starts when the ball is removed from the charger, thus resulting in transmission when the ball is not in use. Englmeier lacks a means to enable the transmitter based upon a shock initialization to indicate that the ball is in use. Barnhill teaches a shock-activated device within a golf ball to begin transmission upon impact, thus limiting any transmission before the ball is in play.

Based upon the energy-saving transmission teachings of Englmeier, Barnhill, and Stoffer, it would have been obvious to one skilled in the art at the time of the invention to save transmission time and energy by incorporating a means to automatically turn on the transmission upon impact and to disable the transmission after a certain time (taught by Stoffer) thus using the shock teachings of Barnhill to improve on the energy saving clocking of Englmeier by providing a more accurate indication of when the ball is in use, thus maximizing the potential to save energy.

Regarding claim 2, the combination of Englmeier, Barnhill, and Stoffer discloses a timer configured to turn on a based on the actuation of a switching device and turn off based upon a predetermined time.

Regarding claim 4, the combination of references does not include at least one light emitting diode; however, the usage of such would be a design choice obvious to one of ordinary skill in the art. The incorporation of a light would not change the

Art Unit: 3713

functionality of the transmitter and thus would be merely representative of a design wherein one of ordinary skill in the art would be motivated by the specifications for their system. These specifications motivate the designer based on the wants, needs, and desired for their system. One would be motivated to use a light, for example, to aid a user in locating the ball at dusk conditions when playing golf is still possible, but locating the ball becomes more of a challenge. Thus, by incorporating a light, a skill artisan would recognize the advantage to the user in terms of finding their ball and would be motivated by such in order to further supplement the users ability to find their ball as is the goal of both of the references.

Regarding claims 5-8 and 14-16, Englmeier discloses the transmitter emits frequencies to detect the golf ball and has the ability to detect different balls based on the signal associated with the ball. Englmeier also discloses a modulator capable of using a coded charge signal (for example pulse code modulation) in order to modulate the signal with player ID information in order for the user to be able to detect their ball (column 5, lines 25-50).

Regarding claims 9 and 17, Englmeier discloses the power signal to be rechargeable (column 2, lines 28-33).

Regarding claims 10-11 and 18-19, the outer cover is partially transparent to the electromagnetic signal as the signal is transmitted through it (FIG 3).

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed March 9, 2006 have been fully considered but they are not persuasive except for the mentioned objection above.

Applicant contends that the Examiner's rejection under 35 USC 112, first paragraph, should be withdrawn because the Specification discloses what a predetermined time is. The Examiner respectfully disagrees. On page 8 of the Specification, lines 12-13, the term "several seconds" is not clear to persons skilled in the art because several seconds can mean different timings, not a predetermined time. Furthermore, the Applicant proves this by stating that the term several "usually can be interpreted to mean from 2 to 4, 5 or 6 seconds or even more," which is clearly not a specific predetermined time because of the variance. The fact that "several" can usually be interpreted as different times does not solidify anything regarding a predetermined time. Figure 4 is no better of an example of a predetermined time because T_0 and T_1 are variables to show the variances of the time and it is absolutely impossible for the Applicant to assume that the variables are "on the order of 4 to 12 seconds" after saying that the interpretation of "several" can "usually" mean a plurality of timings, i.e. "2 to 4, 5 or 6 seconds or even more"; not to mention that "4 to 12 seconds" is a range, not a

predetermined time. Because of the aforementioned reasons, this is not "clear that electromagnetic signal transmission occurs from T_0 and T_1 on the order of from 4 to 12 seconds."

In response to applicant's arguments that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant contends the Examiner's statement that "one skilled in the art would know that when transmitting signals relaying the location of an object, it would be strongly desired to transmit only when necessary as to not waste current, power, or overall capacity of energy." The Examiner respectfully disagrees and would like to point the Applicant towards column 4, lines 60-65 of Englmeier, where it says the pulsed transmission signal is for the purpose of energy saving. Applicant contends that such a pulsed transmission does not control the transmission for a predetermined time. The Examiner respectfully disagrees. Since a predetermined time is not disclosed in the Applicant's specification any time would do; however, in this case the time is regarding the energy store being depleted after shock actuation, wherein the shock actuation activation is taught by Barnhill (Abstract). Applicant contends that the Examiner had no

Art Unit: 3713

“clear and particular” motivation to combine the teachings of Englmeier and Barnhill.

The Examiner respectfully disagrees. However Barnhill’s shock-activated device limits the transmission before the ball is in play, which aids the timed pulsed transmission as taught by the combination of Englmeier and Stoffer. Further, Stoffer was used to teach a timer circuit to control the pulsed transmission (col. 5: 41-67). Stoffer teaches this timer circuit to set a trigger for a predetermined time period, and when combined with Barnhill and Englmeier, energy is saved by the use of the predetermined time periods rather than random pulses.

Applicant states that the art used teaches away, however, the art was used in as combinational references as set for under 35 USC 103(a) not as separate references each individually teaching the invention (See Rejections above).

The Applicant contends that since Stoffer teaches that the disclosed transmitter “can be” turned on and off by a timer circuit that it underscores the hindsight approach. The Examiner respectfully disagrees and points the Applicant toward the paragraph above regarding hindsight. Again, the motivation behind using such a timer circuit along with Englmeier is to save energy for pulsed transmission instead of constant transmission in order to not drain the power source. This is very efficient and obvious to one of ordinary skill in the art. If one can save energy without any hindrance then word efficient comes to mind regarding the combination of Englmeier and Stoffer.

Conclusion

THIS ACTION IS MADE FINAL. The Examiner maintained the same grounds for rejection. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Panos whose telephone number is (571) 272-6136. The examiner can normally be reached on M-F 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey C. Panos
April 13, 2006


XUAN M. THAI
SUPERVISORY PATENT EXAMINER

TC3780